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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/694,006

10/28/2003

Yutaka Shibahashi

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3669

65565 7590 04/19/2007
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EXAMINER

HYLINSKI, ALYSSA MARIE

ART UNIT

PAPER NUMBER

3711

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

04/19/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/694,006

Applicant(s)

SHIBAHASHI ET AL.

Examiner

Alyssa M. Hylinski

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 January 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-16 is/are pending in the application.
- 4a) Of the above claim(s) 9-14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-8,15 and 16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. Claims 1, 3-7 and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gordon (2460221), Kamada (5208132) and Tomonaga (2002/0114956). Gordon discloses a method for alternately expressing a color-memorizing photochromic function in a toy element by arranging a sheet-shaped color-changing means (25) under a contacted or non-contacted condition (Figs. 3 & 4), which contains a light-shading pigment (column 2 lines 54-57) capable of shading at least ultraviolet rays (column 2 lines 54-60 and column 3 lines 1-2), to a toy element having a photochromic layer (13) coated on a sheet (12) which maintains a coloring state by developing a color (column 2 lines 1-4) through the irradiation of ultraviolet rays or sunlight containing ultraviolet rays by means of an ultraviolet irradiator (column 2 lines 5-7) and changes into decolorizing state through its decolorization by the irradiation of visible light when the color-changing means changes the photochromic layer of the coloring state into decolorizing state by cutting off ultraviolet rays of sunlight and thereby effecting irradiation of visible light (column 3 lines 7-16) and maintains the changed state, so as to express a function to memorize and maintain coloring and decolorizing states alternately. Gordon discloses the basic inventive concept, substantially as claimed, with the exception of the photochromic layer being formed of a diaryl ethane compound that is included in microcapsules and includes a binder resin. Kamada discloses an organic photochromic compound that is microencapsulated (column 2 lines 30-34) and can be combined with a binder resin (column 5 lines 38-44) for use with a

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plurality of articles such as toys (column 6 lines 20-27). The photochromic material can also be combined with a dye or pigment (column 8 lines 11-15). It would have been obvious to one of ordinary skill in the art from the teaching of Kamada to modify the coating of Gordon so as to include a microcapsules and binder resin in order to be able to apply a photochromic material to an object that has a high resistance to light when subject to repeated use making it more durable (column 2 lines 22-29). Tomonaga discloses that diaryl ethane is an organic compound that exhibits photochromic properties (page 1 paragraph 4). It would have been obvious to one of ordinary skill in the art to use diaryl ethane as the organic photochromic compound since it has been held that a mere selection of known materials on the basis of suitability for the intended use would be entirely obvious. *See in re Leshin, 125 USPQ 416 (CCPA 1960)*. With regard to claims 6 and 7 and the photochromic layer including a thermoplastic resin and the color-changing means including a transparent plastic, the examiner notes that mere selection of known materials as recited in claims 6 and 7, on the basis of suitability for the intended use would be entirely obvious. Therefore, it would have been obvious to one of ordinary skill in the art to provide the references with the materials recited in the claims in order to use known materials suitable for the intended use. *See in re Leshin, 125 USPQ 416 (CCPA 1960)*.

2. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gordon, Kamada and Tomonaga. The references disclose the basic inventive concept, substantially as claimed, with the exception of an image arranged inside the sheet-shaped compact. At the time the invention was made, it would have been an obvious

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matter of design choice to a person of ordinary skill in the art to include an image because Applicant has not disclosed that an image provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well without an image because the color-changing means would be able to change the color of the toy while being irradiated with light.

Response to Arguments

3. Applicant's arguments filed 1/19/07 have been fully considered but they are not persuasive. In regard to Tomonga relating to glass utilizing an inorganic photochromic material, the reference is only being used to disclose that diaryl ethene is a known organic photochromic compound at the time of the invention.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Taniguchi (5252371) discloses the use of diaryl ethene for obtaining stability in optical disks.

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not


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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alyssa M. Hylinski whose telephone number is 571-272-2684. The examiner can normally be reached on M-F (8-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eugene Kim can be reached on 571-272-4463. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



AMH

EUGENE KIM
SUPERVISORY PATENT EXAMINER